A SECOND SPECIES OF COTOPAXIA (UMBELLIFERAE/APIACEAE), FROM COLOMBIA

Por
LINCOLN CONSTANCE * Y WILLIAM S. ALVERSON **

SUMMARY

Cotopaxia whitei (Umbelliferae/Apiaceae), a new species from the Sierra Nevada de Santa Marta, Dpto. Magdalena, Colombia, is here described and illustrated. The other known species of *Cotopaxia, C. asplundii,* is found only in the mountains of Ecuador.

RESUMEN

Cotopaxia whitei (Umbelliferae/Apiaceae), una nueva especie de la Sierra Nevada de Santa Marta, Dpto. del Magdalena, Colombia, se describe e ilustra. La única especie previamente conocida de este género, C. *asplundii* solo crece en las montañas de Ecuador.

Through the good offices of Dr. Antoine M. Cleef, Instituut voor systematische plantkunde, Rijksuniversiteit Utrecht, Netherlands, and the courtesy of Dr. Gustavo Lozano C., Jefe, Sección de Botánica, the senior author was recently granted the greatly appreciated privilege of borrowing and examining the Umbelliferae in the Museo de Historia Natural, Instituto de Ciencias Naturales, Universidad Nacional de Colombia, Bogotá (COL). The several hundred specimens represent some 25 genera and 70 species, especially rich in material of the genera *Azorella* Lam., *Hydrocotyle* L., and *Niphogeton* Schlecht. However, the most striking single item was a specimen from the Sierra Nevada de Santa Marta that was not immediately referable to *any genus* previously reported from Colombia.

---

* Profesor & Director Emeritus, Department of Botany, University of California, Berkeley, California, EE. UU.

** Department of Botany, University of Wisconsin-Madison, Madison, Wisconsin, EE. UU.

The remarkable richness in Umbelliferae of the Sierra Nevada de Santa Marta was commented upon recently (Mathias & Constance 1967), primarily in relation to the genus *Perissocoeleum*. The accompanying sketch-map (Figure 1) indicates the relative position of the mountain range mentioned and the Sierra de Perijá on the Colombian-Venezuelan border; it extends also to Ecuador, to show the location of *Cotopaxia asplundii* Math. & Const. Tillett, approaching the Sierra de Perijá from the east in 1974, found several Umbelliferae not previously known from Venezuela (Tillett 1978), several of them species that had been presumed to be endemic to the Sierra Nevada de Santa Marta.

Access to the rich Bogotá collections afforded an excellent opportunity to see if there might not be previously undetected endemics from that area, and the discovery of additional taxa of *Perissocoeleum* or of *Niphogeton* would not have been surprising. What was completely unexpected, however, was that a new species would be encountered which is clearly referable to the supposedly monotypic and Ecuadorean genus *Cotopaxia*. The description and illustration of this new taxon follows.

Cotopaxia whitei Constance & Alverson, sp. nov. (Figure 2)

Herba perennis crassa quasi glabra profuse ramosa e radice palari magna lignea; folia basali et caulina ovalia, divisionibus parvis acuminatis; petioli graciles late vaginantes; inflorescentia profuse ramosa, pedunculis infra umbellas interdum scaberulis; bractae involucrales paucae lanceolatae obovataeve trisectae vel pinnatisectae foliaceae; radii plures valde angulati; bracteolae involucellorum integrae vel trisectae pinnatisectaeve pedicellos superantes; pedicelli fertiles pauci alati; fructus oblongus subteretus apice truncatus rotundatusve basi rotundatus, costis omnibus obtuse alatis.

Plants stout, aromatic (lemon-dill scented), 4-5 dm high, purplish-green, glabrous or only slightly puberulent at nodes, branching profusely from base, arising from a large woody taproot; basal and lower cauline leaves oval, 3-7 cm long, 3-6 cm broad, the divisions 2-5 mm long, acuminate, the petioles slender, 10-25 cm long, the lower 1/3 to 1/2 dilated and sheathing, the sheaths scarious-margined, the upper cauline leaves gradually reduced upward; inflorescence profusely branched, the peduncles 2-20 cm long, at most puberulent at apex; involucre of 2-6 lanceolate to obovate trisect or pinnatisect foliaceous bracts 5-25 mm long; rays 5-12 (3-10/-15) mm long, strongly angled; involucel of 2-6 entire to trisect or pinnatisect bractlets exceeding the pedicels; fertile pedicels 3-8, 2-4 mm long, broadly winged; petals ca. 1 mm long; styles 1-1.5 mm long; fruit truncate to rounded at apex, rounded at base, subterete, 4-5 mm long, 2-3 mm broad, all ribs obtusely winged.

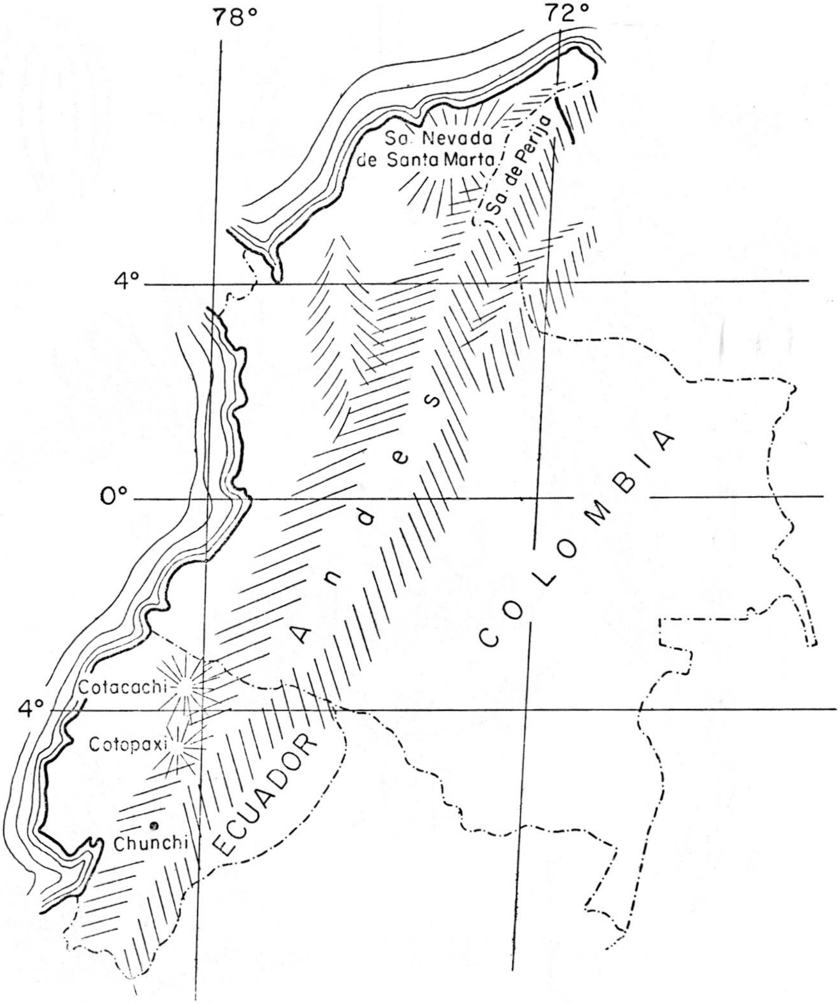
78°
72°
Sa. Nevada
de Santa Marta
Sa. de Perijá
4°
0°
4°
Andes
COLOMBIA
Cotacachi
Cotopaxi
Chunchi
ECUADOR

FIGURE 1. Sketch-map of geographical localities mentioned in text. (Re-drawn from Brittonia **19:** 213. 1967).

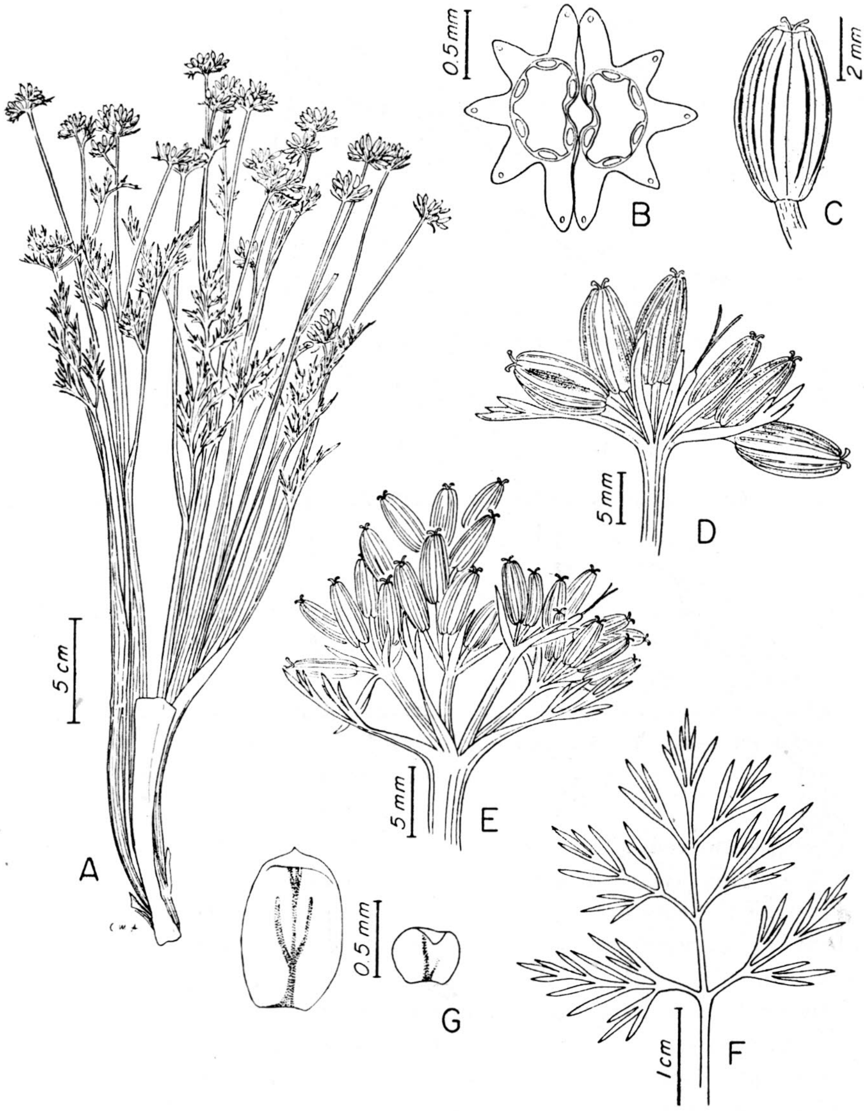
0.5 mm
B
2 mm
C
5 mm
D
5 cm
5 mm
E
A
0.5 mm
G
1 cm
F

FIGURE 2. *Cotopaxia whitei*, a. habit; b. fruit transection; c. fruit, lateral view; d. fruiting umbellet; note divided carpophore; e. fruiting umbel; f. leaf blade; g. petals. (All from the type collection).

TYPE LOCALITE: Colombia. Dpto. Magdalena: Damp spot between large rocks of northwest-facing talus slope with little vegetation (Tundra Pluvial Alpina zone, 500-1000 mm/year rainfall), altitude approximately 4300 m; 1 km directly south of Laguna Naboba (73° 40' W, 10° 47' N), Sierra Nevada de Santa Marta, 21 May 1977, S. White and W. S. Alverson Nº 525 (HOLOTYPE: COL; ISOTYPES: UC, WIS). No material other than the three parts of a single plant have been seen.

The specific epithet is given in honor of Starker White, who together with the junior author when both were students at the University of Wisconsin, Madison, organized and financed their own collecting trip of several months in Central America and particularly in Colombia. Here they spent six months collecting extensively in a few localities, most notably in the Nechí Refugium near Zaragoza in northern Antioquia. Their efforts, with the aid of Colombian herbaria staff members, resulted in 800 numbers, from which some 2.000 sheets were left in Colombian herbaria (deposited mostly at COL and HUA) and an equal number sent to the United States (deposited mostly at WIS, MO, and NY).

Although surprisingly little modification of the generic description is required to admit a second species to *Cotopaxia* (Mathias & Constance 1967, p. 225 and fig. 6), *C. whitei* may be distinguished from the type species as follows.

Plants stout, profusely branched; petioles 10-25 cm long; inflorescence essentially glabrous; involucre conspicuous; fruit wings obtuse.

C. whitei.

Plants slender, sparsely branched; petioles 3-10 cm long; inflorescence definitely scaberulous; involucre obsolete or lacking; fruit wings acute.

C. asplundii.

REFERENCES

MATHIAS, M. E. & L. CONSTANCE.
1967 Some Umbelliferae of the Andean Paramos of South America. Brittonia 19 (3): 212-226.

TILLETT, S. S.
1978 Contributions to the flora of the Sierra de Perijá, Venezuela. I. Phytologia, **41**: 85-87